

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011657**Date Inspected:** 26-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, G. Mundt			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A

Bridge No: 34-0006 **Component:** Hinge K Pipe Beams

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

AG Machining (Boring, OR)

On this date, the QA Inspector arrived at AG Machine shop, to witness the final machining of the Fuse 120A-5. The QA Inspector met with the AG Machinist and AG explained that he was in process performing the second cut pass, for final machining. The QA Inspector noted that the cutting depth was previously set to remove approximately 1mm of overlay material and that this cut pass will machine the Fuse to approximately 1921 mm final outside diameter. The QA Inspector noted that the contract requires a final outside diameter finish of 1920 mm (+/-1mm) with a surface finish of .8 µm.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 2 OIW production personnel and 2 QC Inspectors. The QA Inspector observed at AG Machine shop: 1 AG Machinist and 1 AG Supervisor.

Summary of Conversations:

On this date, the QA Inspector randomly reviewed the Shop Observation Reports that were previously completed by OIW QC Inspector Gary Mundt. The QA Inspector noted that QC Inspector Mundt had previously monitored and recorded the welding activities performed on swing shift on the Fuse 120A-8. The QA Inspector noted that QC

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Inspector Mundt had previously monitored WID #S74, Mr. Bounheune Savanh, performing electroslag welding (ESW) and flux core arc welding (FCAW) repairs on the stainless steel overlay. The QA Inspector reviewed the most current OIW Qualified Welders List, Rev. #12 and noted that WID #S74, did not appear to be qualified to perform the Electroslag Welding. The QA Inspector informed OIW QC Inspector Jose Salazar of this and QC Inspector Salazar explained that he will review the OIW Qualified Welders List with the QA Inspector. QC Inspector Salazar explained to the QA Inspector that his latest Qualified Welders List was Revision #11 and not Revision #12. The QA Inspector informed QC Inspector Salazar that the latest revision was #12. The QA Inspector and QC Inspector Salazar reviewed both Revision #11 and Revision #12 and agreed that WID #S74, Mr. Bounheune Savanh was not on the Qualified Welders List to perform Electro Slag Welding (ESW). The QA Inspector informed QC Inspector Salazar that the cover sheet on Revision #11 states that Mr. Bounheune Savanh was removed for ESW-Outside 6 month qualification. The QA Inspector noted that the welder had exceeded the 6 month period of effectiveness to perform ESW. The QA Inspector then informed QA Inspector Salazar that the welder was still not qualified per the latest OIW Qualified Welders List, Revision #12. QC Inspector Salazar reviewed the latest Revision and agreed with the QA Inspector. QC Inspector Salazar informed the QA Inspector that he will speak with QC Inspector Mundt when he arrives for the scheduled swing shift. The QA Inspector later spoke with QC Inspector Mundt and Mr. Mundt explained that he thought the welder (WID#S74) was qualified to perform the ESW welding on the stainless steel overlay. Mr. Mundt showed the QA Inspector the Revision #11 of the Qualified Welders List. The QA Inspector informed QC Inspector Mundt that the welder was removed on this Revision and the current one was #12. QC Inspector Mundt agreed with the QA Inspector that the welder did not appear to be qualified, per both Revisions. QC Inspector informed the QA Inspector that the ESW had been performed on the following dates on swing shift: 1/18 thru 1/21 and the FCAW to the stainless steel overlay had been performed on 1/21/10. The QA inspector informed Lead QA Inspector Joe Adame of the issue and Mr. Adame explained that this issue will be addressed in the morning, on the following day shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer
